



The Impact of Humidity on Your Home Office

BY COLIN HEFFINGER

AS THE WORLD BEGINS to gradually shift back to in-person events and expanded business capacity, the trend of home offices will continue to reside and flourish even beyond the extent of the COVID-19 pandemic. The pandemic has illuminated the significance of maximizing our productivity and comfort while working at a home office. Though sometimes overlooked, proper humidity levels play a critical role in our health, the health of our pets, and the longevity of wood and appliances throughout our homes. By educating ourselves on how humidity impacts our health and how to maintain it at optimal ranges, we can live healthier lives as we continue to work from the comfort of our homes.

The infographic shown on the right, *A Look at Proper Humidity* by ACHR News, outlines optimal humidity levels and the variety of reasons maintaining optimal humidity levels is important for you and your home.

John Millett is the divisional manager of operations at Schlosser & Associates Mechanical Contractors, a Newark-based business started in 1954 that has expanded its operations to heating, air conditioning, plumbing and a variety of other projects for homes and businesses. Millett explains how readers can measure humidity levels in their home. “The easiest way to measure humidity is through a humidistat or thermostat. The quality of your thermostat makes a big difference. Monitoring optimal humidity levels is important to our health as well as our homes.”

“Our bodies need to always be moist,” Millett continues. “Heaters dry out our homes and bodies. Humidity keeps our mucus membranes moist which in return helps us heal faster, stay healthier and breathe easier, especially during sickness. It helps keep dust, dirt, and pet hair down and out of the air. It also prevents all woodwork from swelling – floors, furniture, cabinets, and more.”

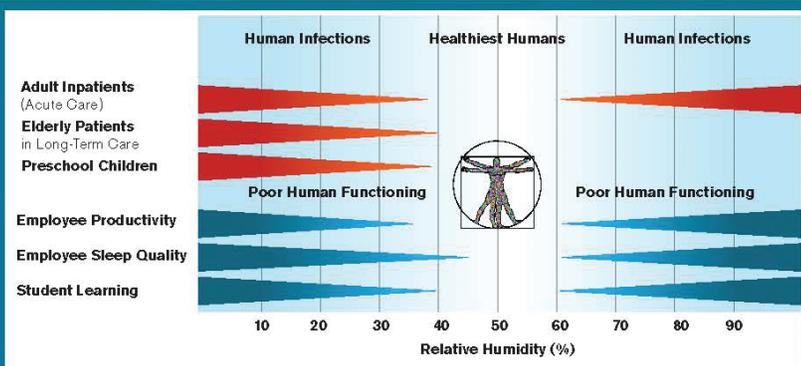
“Whatever you do on your property impacts how you heat and cool your home,” Millett explains. “Cooking, outside humidity, indoor temperature, a fireplace, or an attached greenhouse can all contribute to indoor humidity levels. Any form of forced air dries out your house like the Sahara Desert, in turn needing the proper level of humidity to be brought into your home. Where are you going to plant new trees and which ones are you taking down? The trees block wind and sunlight from entering your home. The sunlight has hidden heat in it called ‘latent heat’. This raises the temperature in your home, and you have to keep that in mind when thinking about interior humidity in the long run.”

Homeowners may feel overwhelmed trying to understand how to maintain optimal humidity levels and the different factors involved. The goal is to aim for the 40 percent range for relative humidity. By maintaining humidity levels, homeowners can lower their temperature and still feel the same. An average home that prefers 70 degrees for interior temperature can have 30 percent relative humidity and lower its temperature down to 67 degrees – saving money over time. Purchasing a standard humidifier, even a small one, can assist in maintaining humidity and their ease of use make them an excellent worry-free option. An additional option is air scrubbers, which are used in a variety of places from homes to airplanes and are an effective way to eliminate dangerous airborne particles like bacteria and viruses.

Schlosser & Associates provides a variety of services including the installation of electric or digital air filtration, ultraviolet air purification, humidification, and dehumidification. When advising homeowners on the role of air humidity in their homes, Millett offers, “We recommend checking the batteries to your smoke alarms when you check your air filters four times a year. This helps keep you and your home safe.” ■

A LOOK AT PROPER HUMIDITY

IAQ-conscious homeowners might be interested to know how humidification can preserve not only their health but the health of their home, too.



Indoor relative humidity in the range of 40 to 60 percent is optimal for human health.



With proper humidification, evaporative cooling of the skin is decreased. As a result, higher thermostat setpoints can save energy (and money) while keeping occupants just as comfortable.



Sitting in a room with 20 percent relative humidity, the average person becomes clinically dehydrated in eight hours. In addition to external irritation, dehydration also impairs brain performance.

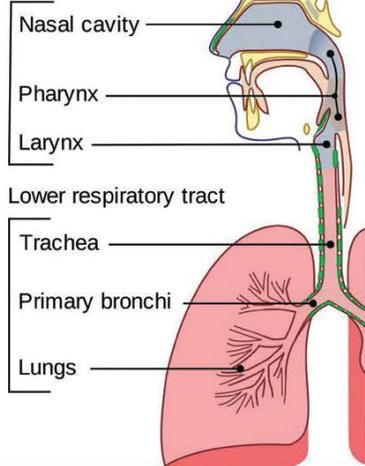


A healthy level of relative humidity increases the effectiveness of cleaning. It decreases surface recontamination from the resettling of infectious aerosols.

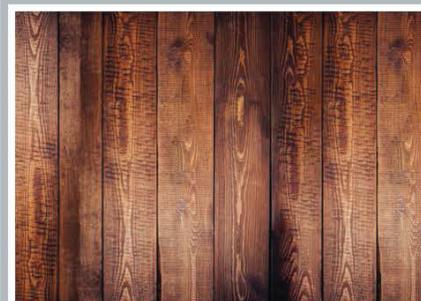


Homeowners will preserve the performance and lifespan of their systems by enlisting a professional for recommended care, always starting with shutting off power prior to maintenance. PHOTO COURTESY OF DERRICK NOH, CC BY 2.0

Upper respiratory tract



Proper indoor humidity maintains lining of the upper and lower respiratory tract, which helps to avoid illness.



Benefits of adequate humidity extend beyond personal health. It also protects hardwood floors from avoidable damage.

Health-related items via Dr. Stephanie Taylor, CEO of Taylor Healthcare Commissioning Inc. After working as a physician for many decades, Dr. Taylor obtained a master's degree in architecture as well as an infection control certification. Dr. Taylor is a graduate of Harvard Medical School (MD) and Norwich University. She has numerous research publications in nature, science, and other peer-reviewed journals and writes an IAQ column for Engineered Systems. Additional info courtesy General Filters and Lennox.

Infographic Courtesy of ACHR News